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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,399	03/26/2004	Takesi Yamakawa	0757-0285PUS1	7539
2292 7590 12/12/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER TRAN, DALENA	
			ART UNIT 3664	PAPER NUMBER
			NOTIFICATION DATE 12/12/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10809399	3/26/04	YAMAKAWA ET AL.	0757-0285PUS1

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PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

Dalena Tran

ART UNIT	PAPER
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3664

20071208

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Office Action Summary

Application No.

10/809,399

Applicant(s)

YAMAKAWA ET AL.

Examiner

Dalena Tran

Art Unit

3664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/24/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant(s)

1. This office action is responsive to the amendment filed on 9/24/07. As per request, claim 10 has been added. Claims 1-10 are pending.

The prior art submitted on 9/24/07 has been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, and 6-8, are rejected under 35 U.S.C. 102(b) as being anticipated by Hosaka (4625697).

As per claims 1, and 7, Hosaka discloses a control system for controlling a control quantity of a subject to be controlled, said control system comprising: a control quantity acquisition section for sequentially acquiring instantaneous values of the control quantity (see at least the abstract; columns 6-7, lines 20-16; and column 10, lines 4-57); a timing judgment section for sequentially determining a time duration of each of specific kinds of behaviors of the controlled subject based on the values of the control quantity acquired by the control quantity acquisition section (see at least columns 4-5, lines 16-33; column 17, lines 9-21; column 20, lines 18-34; column 22, lines 19-23; columns 24-26, lines 25-17; and columns 30-31, lines 56-24); and a behavior pattern judgment section for sequentially determining a behavior pattern which each of the behavior of the controlled subject matches from among multiple behavior patterns

based on the values of the control quantity acquired by the control quantity acquisition section during the time duration of each of the behaviors sequentially determined by the timing judgment section (see at least column 3, lines 19-26; columns 3-4, lines 10-15; columns 5-6, lines 34-20; columns 22-24, lines 57-23; column 26, lines 26-49; and columns 26-27, lines 18-4), a control parameter storage section for storing control parameters in correlation with each of the multiple behavior patterns (see the abstract; and columns 18-19, lines 58-2); a control parameter read-out section for sequentially reading out the control parameters stored in the control parameter storage section in correlation with the behavior pattern which each of the behaviors of the controlled subject matches as determined by the behavior pattern judgment section (see at least columns 19-20, lines 3-17; column 21, lines 6-67; and columns 27-28, lines 21-66); and a control section for controlling the controlled subject based on the control parameters sequentially read out by the control parameter read-out section (see at least columns 12-13, lines 1-12).

As per claim 2, Hosaka discloses a behavior evaluation value calculating section for sequentially calculating an evaluation value of the behavior performed by the controlled subject based on the values of the control quantity acquired by the control quantity acquisition section during the time duration of each of the behaviors sequentially determined by the timing judgment section (see at least the abstract; column 2, lines 13-44; and columns 30-31, lines 56-24), and a control parameter update section for updating the control parameters stored in the control parameter storage section based on the evaluation value sequentially calculated by the behavior evaluation value calculating section (see at least columns 2-3, lines 45-9; and columns 31-32, lines 25-23).

As per claim 3, Hosaka discloses the control parameter update section updates the control parameters used during the time duration of each behavior corresponding to the evaluation value sequentially calculated by the behavior evaluation value calculating section (see at least columns 2-3, lines 45-9).

As per claim 4, Hosaka discloses the timing judgment section determines timings at which the control quantity acquired by the control quantity acquisition section take extrema as being a start timing and an end timing of the time duration of each of the behaviors based on the values of the control quantity acquired by the control quantity acquisition section (see at least column 21, lines 6-67; columns 27-28, lines 22-6; and columns 30-31, lines 56-24).

Claims 6, and 8, are method claims corresponding to system claims 1 and 7 above. Therefore, they are rejected for the same rationales set forth as above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, and 9, are rejected under 35 U.S.C.103(a) as being unpatentable over Hosaka (4625697) in view of Kawada et al. (3656043).

As per claims 5, and 9, Hosaka does not disclose ship's heading. However, Kawada et al. disclose the controlled subject is a ship, the control quantity is the ship's heading, and the control section controls a steering device of the ship (see columns 3-5, lines 32-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach

of Hosaka by combining ship's heading for controlling and monitor vehicle control system such as ship.

6. Claim 10 is allowable.

Remarks

7. Applicant's argument filed on 9/24/07 has been fully considered, but they are not deemed to be persuasive. Hosaka still teaches a timing judgment section for sequentially determining a time duration of each of specific kinds of behaviors of the controlled subject based on the values of the control quantity acquired by the control quantity acquisition section (see at least column 22, lines 19-23; and columns 30-31, lines 56-24); and a behavior pattern judgment section for sequentially determining a behavior pattern which each of the behavior of the controlled subject matches from among multiple behavior patterns based on the values of the control quantity acquired by the control quantity acquisition section during the time duration of each of the behaviors sequentially determined by the timing judgment section (see at least column 3, lines 3-5, lines 19-26; and column 26, lines 26-49).

Examiner maintains that all the references cited meet the language of the claims invention. Therefore, the rejection under 35 U.S.C. 102(b), and 35 U.S.C.103(a) are considered to be proper.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

A shorten statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of

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the mailing date of this final action and the advisory action is not mailed until after the end of the THREE MONTHS shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136 (a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-W (in a first week of a bi-week), and T-R (in a second week of bi-week) from 7:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi H. Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner
Dalena Tran

December 8, 2007

